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ABSTRACT

This paper describes the Netherlands' Pyramid Project, a classroom-based early intervention program which integrates nursery school and primary school organization and content for 3- to 6-year-olds who need special support, such as ethnic or language minority (allochtone) children and children from disadvantaged situations. Section 1 of the paper presents the theoretical underpinnings of the program and its complementary teaching model as built on four basic concepts: (1) child's initiative, focusing on children's play with objects and other children; (2) teacher's initiative, including scaffolding to facilitate learning and helping children to work strategically; (3) psychological nearness, providing children with a feeling of being protected and safe through the actual or psychological presence of a sensitive and responsive teacher; and (4) psychological distance, understanding that objects can be represented by something other than the objects themselves. Section 2 outlines how the basic concepts are operationalized in the development of a total program to facilitate social-emotional, personality, creativity, motor, perceptual, language, and cognitive development and orientation in space and time; the free and focused program components; projects to ensure that all developmental areas are presented in a balanced way; observation and testing procedures; preventive and remedial tutoring; attention for allochtone children; and parent involvement. Sections 3 and 4 of the paper describe initial evaluation results, indicating that the first year of the project has been successful in terms of content and organization. (Contains 32 references.) (KB)

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The Pyramid project

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THE PYRAMID PROJECT

Dr Jef J. van Kuyk

Introduction

In a review study into the effectiveness of pre-school programmes, Royce et al (1982) note the following as characteristics of a successful programme:

- sufficient intensity, at least four half days per week;
- a reasonable period of intervention (two or three years);
- early entry (two or three years old);
- favourable child-leader ration (1-8);
- parent involvement.

From a study by Karweit (1994) it appears that early intervention worked, that pre-school intervention was insufficient and must be continued in the school situation. Failure early on in primary school can be avoided by early intervention and continued intervention. Recent studies have demonstrated which elements lead to effective teaching. Scheerens (1997) has summarized these elements again:

- material and financial resources;
- planned approach and evaluative capacity;
- effective instruction.

Effective instruction involves well-structured teaching with direct instruction as well as children constructing elements for themselves. Adaptive education with limited differentiation in the class can also be effective.

According to Slavin and Madden (1994) effective education is not determined by components that are individually effective but by the relationship and interaction between all elements. He illustrates this with a metaphor drawn from the experiment with an plant. We give one plant enough water, another plant good fertilizer and yet another plant good light. The last plant gets plenty of good soil. In most cases the plant will grow but if the plant gets good water, good soil and good manure and the right amount of light, it will produce a beautiful flower as well. All factors taken together produce an optimal result.

The question is how can a programme be designed that meets all the conditions mentioned above and in which all the active components interact with each other in order to produce an optimal result. In this contribution we present a description of a new educative concept: the Pyramid project. This is a programme for children from 3 to 6 years of age who need special support, for example, allochtone children and children from disadvantaged situations. The three year olds go to play-school at least 4 half days a week. Children between 4 and 6 years of age follow a day programme in the first two groups of primary school (4-12 year olds). A tutor is present for children who need extra help. Teaching in nursery school and primary school is integrated both organizationally and in terms of content. All the elements of the programme are related to each other and interact in order to produce the maximum effect. Such an inter-relationship must be clear and manageable particularly for leaders and teachers so that they can easily understand this relationship and follow its main principals. The new concept creates considerable clarity and stability. We have based it on four fundamental concepts that are related to each other and that are clearly visible in the elaboration of each component. We present a description of the basic concepts of the Pyramid project and a specification of its most important action points. In our conclusion we provide a few interim results of the effectiveness of the first year of a three-year experiment that is being carried out under the auspices of the Ministries of VWS and OCenW. We also provide a short sketch of how the project can be implemented.

1 The Pyramid project

The Pyramid project owes its name to the Pyramid model (Van Kuyk 1994, 1996), an educative model in which young children receive differentiated teaching that is linked to their development possibilities. The Pyramid is also a metaphor for the broad base on which this educational concept is built: its broad foundation provides room for many children and the Pyramid itself provides protection, something that gives children a great measure of security. The Pyramid is built on four corner stones: the basic concepts that work through all activities in the project and provide it with

clarity and stability.

1.1 The four corner stones

The four corner stones of the pyramid project are:

1 Child's initiative;
2 Teacher's initiative;
3 Psychological nearness;
4 Psychological distance.

These four basic concepts influence each other and together provide a firm basis for the Pyramid project.

1.1.1 Child's initiative

The question that arises here is to what extent can a child optimalize its development by using its own initiative. According to Piaget's theory (1970) the child has sufficient cognitive power to direct its development itself. But the child also develops through play and particularly by exploring and playing with objects and in playing with other children. In play the child is confronted with the perspectives of other children. It is precisely the conflict situations that arise in the course of this play that can teach it so much and which can lead to a new balance of knowledge and skill. Research into the development of young children and into free play has shown that the influence of adults can make a contribution here and that play does not by definition lead to development. Sigel (1982) has stress the importance of social interaction. Sylva (1992) made it clear that play without guidence of parents or teachers did not lead to learning or produce development effects. It is clear that the initiate and active involvement of the child is of considerable importance in development. Over the last ten years the constructivist method of learning has become increasingly influentiai. active construction more than passive absorption, making use of ones own experiences and learning to think for oneself are significant here. The initiative of the child is important and particularly its involvement, but the supervision of adults that lead to the child being able to plan and establish goals is explicitly important for development.

1.1.2 Initiative of the leader or teacher

The question that must be raised in considering the initiative of the leader or teacher is what initiatives on their part lead to optimal development in the child. We have already seen that the initiatives of the leaders and teachers are important. This is supported by the Vygotsky tradition (Vygotsky, 1962) often referred to as the social-constructivist vision. It is precisely through the interaction between child and the adult that the child learns the culture and comes to master cultural and social skills. The adults show which skills are important and how these can be learned in a planned and goal-orientated way. What the child still cannot do alone, it can do with the help of adults. A term that is often used in this connection is 'Scaffolding'. The leader or teacher provides the help and support that helps the child get a grip on a game or task: by giving direction, by giving instructions, by (pre)structuring the task and, if necessary, dividing it into smaller parts. But this must take place in a way that ensures that the child is engaged in active learning, as we have already seen outlined in the constructivist vision. From the perspective of processing information this means helping the child to work in a strategic way, to check what it does and to work systematically. In short the child is taught how be conscious of learning - sometimes referred to as meta-cognition. These are also effective methods that leaders and teachers use to help children "learn learning" (Welsch, 1991). Children learn under supervision how they can learn themselves.

1.1.3 Nearness and distance

Nearness and distance are the two other fundamental concepts that are basic to the Pyramid project.

In the first place the concept of psychological nearness which originated in attachment theory: Bowlby (1969), Ainsworth, Blehar and Water (1978), Erickson, Scroufe and Egeland (1985). This theory originates in the research into mother and child relationships and are being increasingly drawn on in pre-and early school education. In pedagological terms, this way of working aims at providing the child with a feeling of being protected and safe through the actual or psychological presence of the leader or teacher.

A concept that seems to contradict this is that of psychological distance. The child must learn to take distance from itself, form its direct environment, from the here and now. It must learn to take distance in time and space. It must learn to make symbolic representations and to relate these to each other mentally. In doing so it must learn develop an overview of the world. This concept originates in the theory of psychological distancing (Sigel 1970, 1993, Cocking and Renninger, 1993). This theory also finds his origin in mother-child relationships which investigate which mother-child relationships are effective for development. Distancing theory has also made a place for itself in pre- and early school education. In designing the Pyramid project I have brought these two concepts together as a basis for the pedagological and didactic action. The concept of psychological proximity is the most basic. From attachment theory we know that a feeling of security is necessary before the child is able to explore the world. A feeling of fear, by contrast, works like a thermostat: it comes on as fear increases. All available energy is then needed to survive, to master the fear. As fear withdraws the energy need to explore, to take distance from the here and now is freed. In fact, the combination of these two concepts reflects the classic paradox involved in bring up children: a feeling of closeness is necessary to create a distance from the here and now and from oneself. It is holding fast and letting go at the same time. But in fact the contradiction is illusionary: psychological closeness is a necessary condition for achieving psychological distance. And psychological distance is determined by taking distance in the social and emotional sense from the physical closeness of the leader or teacher. One concept strengthens the other, and in this relationship they form the basis of the Pyramid project.

1.1.4 Psychological nearness

In order to encourage the creation of psychological nearness, a sensitive and responsive attitude is necessary. The parent or guardian, leader or teacher creates a close relationship by drawing on the following basic principals (Erickson, Scroufe and Egeland, 1985):

- providing a safe environment by emotionally supporting and encouraging the child and ensuring that it is not exposed to negative influences;
- showing respect for the child's autonomy;
- establishing boundaries and, where necessary, providing a structure;

- providing explanations for the child that are appropriate (informative feedback).

1.1.5 Psychological distance

Psychological distancing (Cocking and Renninger, 1993) is the child's increasing ability to understand that an object (a thing, person, idea etc) can be represented by something other than the concrete object itself. Representation allows the child to learn to abstract from the direct here and now. An example of this is an experiment by Perner (1991). Perner gave one year olds a box with a drawing on the bottom. They were asked to show the drawing. One year olds did not understand this request. They threw the box away. Two-and-a-half year olds, however, showed the drawing but in such a way that they too could keep seeing it. They reassured themselves that the drawing was still there. Three-year-olds showed the drawing without looking at it themselves. They already had a representation in their heads. From this we learn that three-year-olds have representations and we immediately see their convenience: direct proximity, the here and now is no longer necessary. The great advantage of the distancing theory is that it is applicable, in principal, in all development areas including the areas of intelligence differentiated by Gardner (1983). Here we refer to a number of examples of how a child can learn to take distance from itself (decentering) and how it learns to loosen itself from the direct here and now in different areas of development.

Emotional development

Young children are strongly orientated to the immediate satisfaction of their needs. Slowly they learn to control their impulses and to postpone their need gratification. They take distance from their direct needs (see the following exemple).

Perception

When a child sees attractive objects such as sweets, it reacts to the "hot" characteristics such as sweet and crunchy (I want to taste this), but it can also learn to attend to the "cool" visual more distant characteristics such as colour and form, in which dominant colours are again "closer" than the abstract square form.

Language

Through language the child learns to give a name to a concrete object. But, as it learns to think in a meta-linguistic way, it can see a word as a rhyme and later can differentiate the word from the sound.

Thinking

Two year olds are dependent on objects. If they see a ball rolling they run after it, later thought (concepts/symbols/representations) controls action (Vygotsky, 1984) again. Later still the child allows itself to be impressed dominated by striking qualitative characteristics such as size. In this way it learns how to determine sequence and finally learns to determine number. It learns to take distance first by thinking through doing and then by doing through thinking and, subsequently, it learns to move from thinking qualitative to quantitative characteristics.

Spacial orientation

By orientating in space, the child learns to take distance by proceeding from its own body, to draw relationships in space and subsequently to make relationships between object and object (from subject-subject relations to subject-object, to object-object relationships).

This distancing is related to a two-sided process (Cocking and Renninger, 1993). On the one hand a child must take distance at as high a representative level as possible. Sigel (1993) differentiates three levels of distancing strategy:

low level:	labelling
	reproducing
middle level:	eductions from similarities and differences
	drawing relationships between cause and effect
high level:	anticipation
	evaluation
	drawing conclusions.

On the other hand the child must be approached as closely as possible at the level of its own experience and knowledge.

- This has a motivating aspect: what is close to the child captures its interest (life and experience world).
- It has a development aspect: the child is approached at its development level (DeLoache 1993, Mischel and Rodriguez, 1993, Flavell and Miller, 1993).
- It also has a didactic aspect: making connections to what is known. A beginning must be made in the world of objects familiar to the child, contexts drawn from the world of its experience and attractive features. Working from this point abstraction and complexity are reached.

The question is how these basic concepts can reinforce each other in the education of young children between three and six years of age and how the pyramid can be elaborated.

1.1.6 Complementary model

In the Pyramid project I employ a complementary teaching model.

- The children's initiative is the departure point and ultimate objective of upbringing, the more cognitive power, the greater the possibility for self direction.
- The leaders and teachers give direction to the child's development: they determine which objectives are important, how these should be achieved and bring the culture outside the school into the school itself.
- The leaders and teachers supervise the development process by "scaffolding" which allows them to give the child as much chance as possible to learn actively.
- Children who are not in a position to direct themselves (learning problems, little initiative, little motivation) are given support, supervised or are guided by leaders and teachers.
- Guidance is given in proportion to the child's ability to discover its culture for itself and its capacity to participate in active learning.

The complementary model is elaborated on the basis of a sensitive, responsive attitude to the leader or teacher who, in a climate of security and protection (psychological closeness) teaches the children to take distance (psychological distancing) from themselves and from the here and now through the development of representations.

A wide repertoire of skills is required in order to work with this complementary model and to bring the initiative of the child and the leader or teacher into balance. We can distinguish three sorts of teaching situations that are representative of the Pyramid concept.

The creation of play and exploration situations

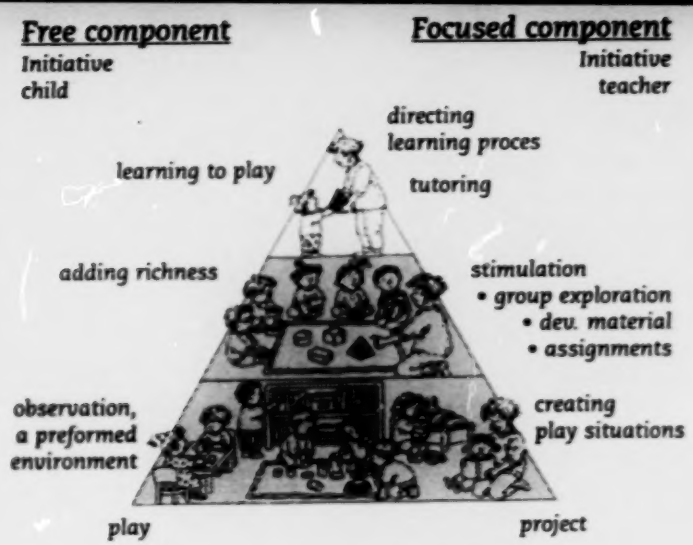
In a pre-structured environment children are offered the possibility and given a stimulus to explore and play according to their own wishes and needs (construction principe).

Stimulating development

The leader or teacher takes the initiative by offering development material in which the child is directed by the material and through interaction with other children in order to work in a goal-orientated and planned way on development goals. This child learns through active learning and is brought to the highest level of development. The takes place in a group context and individually and takes in the form of projects situated in contexts that motivate the children (social construction principal).

Direction of the learning process

The leader or teacher helps the child by giving direct instruction to those children who came from disadvantaged situations. Instructions are given in a structured way in order to help the child progress step by step, The object is to give children more self confidence and a feeling for initiative (direct instruction principal).



Pyramid Project

2 Elaboration in action points

In the following section we indicate how the basic concepts of the Pyramid project formulated earlier are operationalized in a series of action points.

2.1 Pedagogic basis

As we made clear in our discussion on basis concepts, a necessary condition is that all children feel they have a safe environment in which to develop. A child can undertake action if it has a feeling of psychological closeness. A strong pedagogic basis is developed by applying the principals of the attachment theory.

2.1.1 The principals of attachment theory

These basic principals are elaborated in various activities. To begin at the beginning. When the children come to playgroup/play school in the morning, they are greeted personally. When they leave at the end of the day, care is taken about saying goodbye and the leader or teacher helps the children with their play so they feel safe and can explore. In the "walking play" as the first part of the programme is called the parents can also take part in order to make the threshold from home to school as easy as possible. In play the autonomy of the child is not only respected but also stimulated by helping it to take initiatives itself and also to make choices itself. The leader or teacher has high expectations of the children and support them emotionally at all times both whilst they are playing and carrying out tasks and at difficult moments. Attention is explicitly given to learning rituals and rules. This takes place at the beginning of the year in the Welcome Programme which goes on for some two to four weeks. Each rule and each regulation receives specific attention. This provides stability and makes things clear. The rules are regularly repeated throughout the year.

2.1.2 Management

A great deal of importance is attached to management. Specific attention is given to various activities and events: how do you sit in the circle; what do you do when playing and working; what are the rules for going outside etc. Management is an everyday responsibility. By providing the children with a clear structure with clear rules and rituals the children know what is expected of them and are quickly able to play and work independently. This gives then a sense of self confidence and certainty. In this meta-cognition is important: the children are made conscious of what they are able to do. This makes it possible to talk about activities. A sensitive responsive attitude is necessary on the part of the leader or teacher in order to pick up signals from children and to be able to react adequately.

2.2 The programme as a whole

A first operationalisation is the development of a total programme. Eight development areas are included in this and are representative for the development of the child as a whole. The areas correspond closely to Gardner's classification of intelligence areas (Gardner 1984) and are derived from curricula for young children in pre-and early school education both in the Netherlands and abroad:

- social-emotional development;
- personality development and ability to cope;
- creative development;
- motor development and preparation for writing;
- development of perception;
- development of language and preparation for reading;
- cognitive development and preparation for mathematics;
- orientation in space and time and orientation in the world.

These development areas are reflected in each different part of the programme:

- in play;
- in projects;
- in cursory activities;
- in observation and test programmes.

2.3 Free component and focused component

In order to anchor the initiative of the child and the leader or teacher in the programme a free component and a focused component has been created. In the free component the initiative of the child is central and it can choose to do what it wishes according to its own desires and needs.

In the focused section the leader or teacher takes the initiative. He or she brings the outside world inside in the form of motivating contexts. Every two weeks a new project is offered in which the eight development areas are central and which supports the other development areas. Cursory activities have also been developed for each development area and this is incorporated in the contexts of the projects.

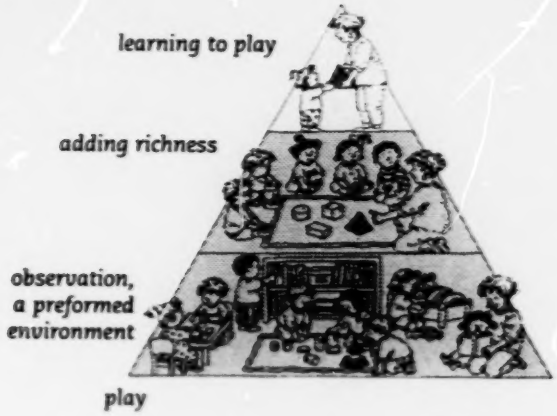
2.3.1 Play in a pre-formed environment

The child plays in a pre-formed environment. The classroom is furnished according to a number of principals laid down in the Pyramid project such that a unity is created of the various corners (house corner, drawing corner, building corner, language corner, cognitive corner) and places (discovery table, table for development material, climbing frame for three-year olds) which allows children to explore the eight development areas. The corners and material must be attractive and challenging for the children. There a book of material in which all the most important material for use in the class is described as well as new material that has been developed in the context of the Pyramid project (Van Kuyk, 1995). By designing a pre-structured, challenging environment the leader or teacher plans play possibilities in a goal-orientated way that ensures that all children have sufficient richness in their play.

Play activities are based on the Pyramid principal.

- **Creative play situations**: the encouragement of the child's own initiative and its ability to make its own choices.
- **The enrichment of the play of children whose play shows little evidence of richness:** by playing with them and making suggestions about play whilst proceeding from the play of the child itself (scaffolding).
- **Learning to play**: letting the child see how you play, playing oneself and giving the child suggestion for play (Van Kuyk, 1996). Children who do not play or who find it difficult to do so are taught how to play because play is seen as an important development phenomena (Sylva, 1992).

Free component
Initiative child



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2.3.2 Projects in the three-year plan
In order to ensure that all eight development areas are presented in a balanced way, and at as high a level as of distancing as possible (Sigel, 1993), every year a project is planned once every two weeks. Each year the same subjects are dealt with, for example, "House", but at increasingly higher levels: for example, in play school "The House", in the first class "Rooms", in the second class "Moving" (horizontal programming). In the project's programmed in the year plan increasingly difficult cursory activities are included such that all development goals are covered at an increasing level of difficulty (vertical programming). In this way the projects form the heart of the focused section of the programme. In order to ensure that all the children in the project get the chance to take initiatives themselves and make their own choices and also that the initiative of the leader or teacher is such that all children can learn as much as possible, three types of learning situation have been created. These are based on the Pyramid model.

2.3.2.1 Creation of play situations
In the play situations created and orientated to each project children begin to experiment with material that is laid out or made ready for that project. In comparison with the pre-structured learning environment for play this activity can be seen as presenting new material in corners and on the discovery table with new stimulate the child to explore but which will also focus on the project.

2.3.2.2 Stimulating development
The stimulation to development comes in the carrying out the activities of the project. At its core is **group exploration.** Here children and teachers explore a subject together. One of the objectives is "modelling": learning before hand how things can been studied. In addition it is important to investigate and communicate together on the subject. Many children from deprived and disadvantaged situations have had very little chance to learn how to explore (Sigel, 1993).

By making group exploration a fixed ritual, children learn to explore by doing and communicating in a safe environment. This is something that will also benefit their own individual play and work. The second objective is to bring children to as high a level of distancing strategy as possible (Sigel, 1993).

From research by Sigel, Stinson and Flaugler (1991) it appears that when children function at a low level of distancing, the development of higher strategies is suppressed. In order to bring children to as high a level of distancing as possible we take two factors into consideration.
1 Ensure that all children acquire good concept formation. We do this by providing clear examples and pointing out relevant features in the steps Demonstration and Broadening.

2. Ensuring that children are challenged to active learning, to solving problems to anticipate and, in short, to learn to constructe their learning. This takes place in Deepening. It is tempting to challenge children and let them actively look for solutions from the beginning. Research by Ames and Ames (1989) has shown, however, that there is considerable difference between children in the degree to which they are in a position to make constructions and use these to make abstractions of reali[illegible]ess gifted and less successful children are more quickly discouraged when a great deal of cognitive power and creativity is demanded of them. In the Pyramid project there are many children with educational delays, children with social problems and limited learning ability. Thus we chose a safe path adapted to the group that offers activities that are clear and structured. And we use concrete material to do so. From this point increasingly greater distance is taken from the here and now. Once children have acquired the concepts, they are challenged and learn with learned "play".

Group exploration begins close to the children (nearness) and is developed in four steps with increasing distance being taken at each step. These steps are elaborated in each project. They are as follows:

Orientation
The first step is orientation. Here the children are introduced to the subject (for example, through the discovery table, a song, a story or a concrete object). They are brought in the right frame of mind to begin working on the project in a positive way.

Demonstration
The first learning step is demonstration. The leader or teacher gives clear examples in which the most important features are explicitly present. He or she point out the relevant features and allows the children to manipulate them. The accent is on perception and putting things into words.

Broadening
The next learning step is broadening. More clear examples are provided. The examples are compared to each other and a link is made with the child's own experience. Leaders and teachers and children communicate about the subject and make initial connections. The accent is on observation and communication through language.

Deepening
In the last step the subject is gone into more deeply. This process is known as deepening. Using concrete material or illustrations the children are challenged to think about the subject. They learn to reflect about surprising situations (How do I know that it rains if I do not look?), they learn to solve conflict situations and to control themselves). What the children learn, they apply in new and unusual situations and they learn to be conscious of what they learn. The accent here is on perception, language communication and thinking.

Processing
After each step the children can process what they have learned either through individual activities or through activities in smaller groups. These can be free or restricted tasks or creative activities. Working with development material has a prominent role in processing.

2.3.2.3 Directing the learning process
Children who are unable to benefit sufficiently from playing with the material or from group activities and individual processing receive individual help. Here the process of learning is very strongly directed by the teacher. This is done on the bases of the teachers observations. The objective is to make the children independent. A special form of individual help is tutoring (see 2.5)

2.2 Observation and testing
One of the most effective ways of getting good results is education is to make use of planning and evaluation capacity (Scheerens, 1997). One of the most important aspects of planning is following the children in their development and taking measures to offer the children a learning trajectory that is adapted to their stage of development. For this reason observation and testing is used in the Pyramid project. Testing is regarded with ambivalence by many educationalist (see article AERA.. Meissels ..) "Most educators are extremely ambivalent about standardized tests, they love them or

they hate them; they adopt them or they reject them; they need them or they do not need them' (Meisels, Steele and Quinn-Leering, 1993). However, it is important to distinguish between the functions of tests and between evaluation and the teaching provided. In a simple way tests are often linked to a selection function: removing weaker children from the group. In the Pyramid project tests have a different function. They are in fact used to keep children in the group by providing effective help and strengthening the child's development process. The programme is to a very large extent preventive.

Evaluation is collecting reliable and valid information in as short a time as possible in order to be able to direct the teaching process more effectively. Quick ways of doing this are with pencil and paper tests or with interactive tests on the computer. Here the teacher has an objective evaluatory function. In teaching, the supportive objective task is relinquished and a call is made on the "helping" aspect of the leader or teacher's task. The leader or teacher searches for material and a method that contributes as much as possible to development objectives. In the case of young children this will be concrete, three-dimensional material which the child can use in play and in learning to speak and think.

In order to accommodate the differences between children and to be able to respond with a considerable degree of sensitivity to these differences a powerful observation and testing system has been developed in order to be able to follow the educational process of each child in various development areas. Three types of instrument are used:

2.4.1 Observation instrument
This is used to monitor day to day education in the free and focused sections. These are extremely practical instruments. They are, it is true, subjective, but when used regularly they have a reasonable degree of reliability and ecological validity. Observations focus on play, the making of choices, involvement in the projects and task behaviour in processing. Observations are also made on whether children have mastered the most important concepts in the project or not.

2.4.2 Monitoring system for two to three year olds and for four to six year olds
This system consists of tests that are given every six months and which allow children's development to be monitored at the level of cognitive development: their language development, thought development and their development of notions of space and time. These tests are more detached and independent of the specific content of the projects. The same information is collected for all the children under the same type of conditions so that well-organized decisions can be taken. These tests are reliable and valid and, because of their more detached character, give teachers the opportunity to reflect on the education given in the previous six months and the results obtained by each child. This monitoring system has been developed on the basis of the Item-Response Theory (Eggen and Sanders, 1993) and offers the possibility of being able to compare tests from different years on the same scale. Thus the child's previous performance can be a criterium and it can immediately be seen whether the child has made progress when compared to the results of a representative norm group. Children who show they are ahead or lag behind the group can immediately be identified. An observation scale social-emotional development and play-work behaviour is also used.

2.4.3 Diagnostic tests
Children who have low scores in the four to six year old monitoring system become candidates for diagnostic tests. If decisions are not clear, individual diagnostic tests can first be given in order to measure what precisely is the nature of the child's delay. These diagnostic tests focus on:
- language and preparations for reading;
- cognition (ordering) and preparations for mathematic;
- space and time.

The individual diagnostic tests are coupled to programmes of individual help in order to provide the children with the appropriate degree of assistance. They are used in the tutoring programma. An important priority in the Pyramid project is taking decisions on the basis of observation and test information.

Children whose test scores on the test of the monitoring system for three year olds or four to six year olds falls in the last 25 percent come into considered for special tutoring. This will continue until they rise above the level of the national norm for the 25 percent least gifted children. The test take place every half year. Children who have not yet mastered the basic concepts and skills of the project receive remedial teaching at the end of each project.

Listen carefully
'Which child is pointing?'

2.5 Tutoring

Tutoring has been found to be an effective way of offering help to children who are delayed. This appears to be the case if the help is professional and individual. Slavin has applied tutoring to children between six and seven years of age to help them learn to read (Slavin, Madden, Karweit, 1994) in the Success for All project.
Tutoring is, as the introduction points out, most successful if it contributes to the programme as a whole. It must be a part of the daily programme. A second effectiveness aspect is the length of tutoring (Leseman, 1996). A short period is, in general, not effective. A long period with a qualitatively good programme is effective. In the Pyramid project tutoring is linked to the projects. The tutor works in a preventive way on each of the steps: Demonstration, Broadening and Deepening. A special tutoring programme has been written for each project and differentiation is included in order to make activities easier or more difficult. In the Pyramid project tutoring takes place on a wider scale: the development areas in the projects. It is expected that by giving a longer and a more intensive learning period to young children, more serious delays in learning can be prevented. If these expectations are realised an expensive measure such as tutoring by an extra teacher can be justified. It is an investment for the long term.

Tutoring is carried out in two ways:

- **preventive**

The tutor prepares the child for group-exploration of the project. The child will then have more chance to be able to work with other children such that its self confidence is increased. In this way a positive spiral comes into being and experiences of failure become experiences of success. This is directly linked to the daily programme.

- **remedial**

Children who are not able to profit enough from preventive tutoring get remedial tutoring at the end of every project. Here tutor activities are repeated, particularly basic concepts.

2.6 Attention for allochtone children

From longitudinal research on four to six year olds using the monitoring system (Van Kuyk, in press) it appears that allochtone children score, on average, 20% lower than Dutch children in the areas of language, cognition and concepts relating to Space and Time. It also appears that Dutch children get higher evaluations on observation scales relating to social-emotional development and play-work behaviour. For these reasons alone allochtone children need extra attention. In addition they have to make an extra effort to come to terms with the Dutch language which - an additional handicap - is also the teaching language of education.

The Pyramid project focuses on learning in Dutch and learning the Dutch language as the best way of ensuring success at school. Attention is given to these aspects in the following way:

- where possible (allochtone teacher) children get the chance to learn in their own language;
- allochtone children learn certain basic concepts in Dutch as quickly as possible through group exploration, individual help and tutoring;
- at the beginning of the year allochtone children work through the programme "Welcome" in order to learn, in a short space of time, the most important rules rituals and concepts. Knowing these rules, rituals and concepts gives the child a sense of security. In tutoring, attention focuses on the acquisition of Dutch as a second language;
- OET activities in the children's first language is linked to the projects.

2.7 Parent involvement

The involvement of parents is important because school and parents share the task of upbringing. The importance of the parent activities is to stimulate cooperation between the way the child is brought up at home and its training at school. Here too the various aspects of upbringing are brought together in order to ensure optimal development. Parents can help to extend the learning period available to the child. Three types of learning activities can be differentiated:

- providing parents with information about the twice-weekly projects;
- parents work with their own child in the group after the leader or teacher has been through an activity first, for example, reading to child or doing a piece of work. This can work through in the home situation. These activities generally take place during parents week.
- the parents are given pieces of work to take home. These are based on the projects in order to increase the amount of time children have to learn. If necessary the instructions are given in the parents own language.

3. Experiment

Combinations of play schools and primary schools (4-6 year olds) should express interest in participating in a project that would be funded by the Ministries of VWS and OCenW. An independent commission consisting of educationalist should determine whether or not the combinations satisfied the criteria laid down by the Ministries:

- cooperation between play school and primary school or other combinations;
- play schools and primary schools have a vanguard position in education;
- three year olds attend the play school for at least four half days;
- there is a favourable leader-child ratio (+/-1:10) in play school or teacher-child (+/-1:25) in primary school (4-6 year olds);
- a tutor is available four half days per week;
- play schools and primary schools are prepared to invest extra money in acquiring development material;
- there is a programme supervisor available to provide support to play schools and schools.

Three locations were chosen in large and medium sized towns: Rotterdam, Zwolle and Ede/Barneveld, referred to as the first block. In total there were seven play schools and seven primary schools. A second block with schools from selected medium and small towns and locations in the countryside was chosen a year later: Breda, Emmen and Den Ham and consisted of six play schools and six primary schools. In total there were +/- 1000 children and +/- 130 teachers and tutors. After a preparatory period in which play schools and primery schools drafted budgets, appointed personnel and acquired the necessary material, the experiment eventually took off in 1996. In the beginning play schools and primary schools received a two-day training, followed by one training day every month in which leaders and teachers received information, practised skills

and were given assignments which they introduced and slowly implemented in practise. In total the leaders and teachers received 20 training days in three years. Cito staff who followed the whole process right down to the work floor, supervised the leaders and teachers during the first year and prepared programme supervisors to take over this task. A book was available covering on the implementation of the programme and there was a book for tutors, who to some extent followed a separate course of training. OET teachers were involved in the training. In June, the first full year of the first block of the experiment had been. Some interim evaluation data are available.
Question lists for teachers and tutors for the first year: we provide a brief description of the findings.

4 Provisional results

1 From an evaluation involving 80 leaders, teachers and tutors from the first block it appeared all leaders, teachers and tutors wished to continue with the project in the new school year.
2 The elaboration of the project appears to work in practise. There were no criticisms of the main lines of the project but there were some comments on a number of details (story was too difficult, the verse was too simple, the activity was difficult to carry out).
3 The introductory play interlude was implemented almost everywhere and went off successfully. There was some variation in frequency however, caused by practical problems. Active participation by parents during the was a problem in a number of "walking play" cases. Too few parents played together with the children.
4 Projects were implemented successful from the beginning. The steps of the project were followed. Considerable preparation was needed, also with the tutor in order to make preventive tutoring possible.
5 In general the observation and test results correspond well with the expectations of leaders and teachers. The indirect linking of tests to the content of the projects were seen by the leaders and teachers as a disadvantage.
6 The tutoring programme appeared to work well. The tutors were enthusiastic about their work and found it made sense. Cooperating with the leader and teacher is a process of growth. Lack of time for consultation is a problem. Tutors in play school usually take the initiative. Teachers do this more in the primary school.
7 Use of the Welcome Programme has produced an improvement in rituals and rules. A line can again be found running through the groups. The large groups that come into being during the course of the year are seen as a problem. The day-rhythm package and the play-work board is used almost everywhere with success.

Conclusions

The first Pyramid year has been successful in terms of content and organization. In practise the concept seems to be one that can be implemented but there are some details that must be adapted so that theory and practise are better coordinated. Play schools especially are positive about the pyramid project: "there is an added value for the themselves and for the children". The ability to influence three to four year olds, because of the limited availability of four part days per week, is significantly less than the influence exerted in class 1 and 2 of primary school.

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